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Remarks

The present response is to the Office Action mailed in the above referenced case on November 30, 2005. Claims 8-10, 13 and 14 are presented for examination. The Examiner rejects claims 8-9 and 13 under 35 U.S.C 102(e) as being anticipated by Mendelson et al., (US 5,754,738) hereinafter Mendelson. Claims 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendelson in view of Liebowitz et al. (U.S. 5,812,545), hereinafter Liebowitz.

Applicant has carefully studied the prior art, and the Examiner's objections, rejections and statements of the instant Office Action. In response, applicant provides arguments that will clearly establish that the claims as amended are patentable over the prior art references presented, either singly or in combination. Applicant points out and argues the key and patentable distinctions of applicant's invention, as embodied in the claims as amended, which clearly overcome the prior art presented. Applicant herein reproduces the amendment to the specification, in proper format, to enable complete understanding of the changes made.

The Examiner provides the art of Mendelson to teach independent claim 8 in its entirety and claim 14, relying on Liebowitz to teach the claimed division key. Applicant argues that Mendelson fails to teach a system for transmitting packets on a broadband network, as claimed. Mendelson teaches a system for formatting an MPEG video stream prior to transmission on the network. Mendelson teaches a system for formatting a transport stream 200 with a compression engine, to be delivered over network 130. Applicant's invention is not limited by software and takes place at the level of actual packet transmission on the network, not inside the compression step, as in Mendelson.

Mendelson teaches padding a transmission stream created with an MPEG compression software in order to meet minimum bandwidth in a constant bit rate (CBR) stream. A standard prior art CBR encoded MPEG transport stream includes packets filled with padding bits. The padding packets compensate for differences in compression deficiencies for various portions of the program (col. 6, lines 8-17). In Mendelson's

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invention, the padding packets are filtered out and replaced with content of a limited size and type related to the video content (Figs 1 and 3). In the event that content is not available to fill the space left from removing padding packets, additional padding packets are provided instead.

Mendelson filters out the padding packets from the incoming MPEG video stream (Fig. 4) and puts the hard content in primary content buffer 412, and generates content to replace the padding packets which is placed in secondary content buffer 414. The secondary content is then interleaved in a linear manner into a data stream generated from the primary content buffer 412 in order to maintain the constant bit rate. The relative rate of insertion is periodically adjusted for each PCR (program clock reference) detected. For example, two bytes of secondary content needs to be supplied for each four bytes of primary content to maintain the constant bit rate 604. Applicant points out that the PCR's are determined when receiving and filtering content from original MPEG received, and must be strictly adhered to when formatting for secondary content.

Applicant teaches in the background portion of the specification that the present invention is an alternative to compression because compression of files is sometimes used as a technique to enable faster download times, but this expedient requires the user to have the appropriate software to decompress that particular file type. Often different software applications must be purchased by the user in order to decompress differing file types and so on. Many of these improvements cost the user in terms of the money and time spent to install and operate them.

Alternatively, applicant teaches a system which transmits autonomous packets of data resized to a specific size available in between transmission bursts of time sensitive data (video) in a manner as to not disrupt the transmission of the time sensitive data. In applicant's invention any type of data of any size can be sent because it is not inserted within video content packets, as in Mendelson.

Applicant argues that Mendelson is limited as to type of data and the size is restricted to the size of the padding packets as originally received in the MPEG. Further applicant argues that the secondary content cannot be autonomous from the primary

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content because Mendelson does not teach a facility at the receiver's end for filtering out the secondary content. In Mendelson the secondary content must be video related text or a stationary graphic which is viewed along with the video stream at the user's end.

The Examiner states that Mendelson teaches resizing data packets. Applicant respectfully disagrees. The size of packets in Mendelson is dictated by the detected PCRs upon receiving MPEG content from providers prior to resending. Mendelson actually pads packets containing video content and does not resize existing packets to fit in the satellite transmission, as claimed.

Applicant teaches a system having a satellite link capable of sending data at 20 Mbps. A file of 80 Mb arrives at server 29, and the APPP driver determines the best route is the satellite path. Now assume that queue 67 is reserved for video, and to provide uninterrupted video at the user's PC, a packet must be sent every fraction of a second. If the 80 Mb file is queued in queue 69, when it is sent, it will tie up the satellite transmission for about four seconds. Assuming packets need to be sent during this interim from queue 67 for video (or any other type of real-time data stream) the four second transmission of a single packet will cause an interruption in the video stream at the user's end.

In an embodiment of the invention, packets of a size large enough to cause such an interruption as that described above are divided into packets small enough to be sent in between bursts from queue 67, so the larger file may be transmitted without disrupting the video stream. The size to cause such a division and the dividing factor will be determined by such factors as the capacity of the satellite link and the time that may be available for transmission between video packet transmission.

Applicant argues that the art of Mendelson can never send a large file in need of resizing because of the PCR limitations of the original received MPEG video stream only allows secondary data of a size equaling the difference between VBR and CBR, and packets are created and generated for this specific size, existing packets are not resized.

Applicant's specification clearly recites that APPP driver 59 performs an additional function of slicing large data packets and sending reduced-sized packets via the

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satellite path interspersed between transmission bursts of the time sensitive data. Therefore, the 103 rejection regarding Liebowitz fails as Mendelson does not resize packets, therefore needing a key.

Applicant believes in light of the claim amendments and arguments presented above, claims 8 and 13 are clearly patentable over the art as Mendelson clearly fails to substantially teach applicants invention. Depending claims 9, 10 and 14 are then patentable on their own merits, or at least as depended from patentable claim.

As all of the claims as amended and argued above are patentable over the references cited and applied, applicant respectfully requests reexamination and that the case be passed quickly to issue. If there are any extensions of time required beyond an extension specifically petitioned and paid with this response, such extensions are hereby requested. If there are any fees due beyond any fees paid by check with this response, authorization is given to deduct such fees from deposit account 50-0534.

Respectfully Submitted,
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